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Radical hysterectomy for stage 1 cervical carcinoma in Northern Ireland. A five year review

N McClure, J Price, E B Bond

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SUMMARY

Forty-four radical hysterectomy operations were performed between 1981 and 1986 for stage 1 cervical carcinoma. The five year survival rate, (actuarial) was 84%. All deaths were directly attributable to disease recurrence. Five year mortality was higher in those under age 45 years, and who had more than two pregnancies. Histology and node status did not show significant correlation with outcome. In comparison with results of radiotherapy for this condition in Northern Ireland, (five-year survival rate 67·6%), radical hysterectomy produced better survival for stage 1 cervical carcinoma.

INTRODUCTION

In 1898 Wertheim[1] performed the first radical hysterectomy in Vienna whilst Forsell[2] first treated carcinoma of the cervix with radium. Since then the debate as to which is the more appropriate treatment for cervical carcinoma has remained unresolved. Both methods have been refined, modified and employed either separately or in combination (Rampone[3]). Houston[4] has recently reviewed the results of radiotherapy for all stages of cervical carcinoma in Northern Ireland. In this paper the results of radical hysterectomy for the treatment of stage 1 cervical carcinoma are presented and the two therapeutic regimens compared.

MATERIALS AND METHODS

Forty-four radical hysterectomies were performed between June 1981 and June 1986 in the Belfast City Hospital on patients clinically assessed to have stage 1 cervical carcinoma. Neither pre- nor post-operative radiotherapy was employed. The operation consisted of removal of the uterus, cervix, a vaginal cuff of one to two centimetres, and dissection of the parametrial tissues and pelvic nodes. Removal of the ovaries was optional and depended largely on the age of the patient: those under 45 years generally having one or both ovaries conserved, those over 45 years generally having both ovaries removed. All specimens were examined histologically at the pathology department of this hospital.

Belfast City Hospital.

N McClure, MRCOG, Registrar in Gynaecology.

J Price, MD, MRCOG, Senior Tutor in Gynaecology.

E B Bond, MD, MRCOG, formerly Consultant/Senior Lecturer, now Consultant Obstetrician and Gynaecologist, The Ulster Hospital, Dundonald.

Correspondence to Dr McClure, Fellow in Reproductive Endocrinology, Brown University, Women and Infants' Hospital, Providence, Rhode Island, 02908-9976, U.S.A.

The patients were reviewed at a joint gynaecological/oncological outpatients' clinic. Any patients in whom recurrence was suspected were investigated appropriately and, if necessary, treated with radiation therapy.

RESULTS

There was no operative mortality. In acute operative morbidity there were two cases each of urinary tract infection and chest complications, five wound abscesses and one pelvic abscess. Three instances of ureteric damage and one of urinary retention were recorded. There were no cases of deep vein thrombosis. No patient suffered long-term sequelae from the acute infections. The three cases of ureteric damage were detected during operation, repaired immediately, and no long-term complications developed.

Chronic operative morbidity included two cases of leg oedema, one of urinary incontinence and one of coital dysfunction. No vaginal fistulae developed. Incontinence of urine, (urgency in type), and coital dysfunction occurred in women aged over 60 years and may not necessarily have been related to surgery.

TABLE

Percentage survival after radical hysterectomy, using various potential predicting variables

	Survived (n = 37)	*Dead (n = 7)*
Age at treatment:		
< 45 years.	21 (78%)	6 (22%)
⩾45 years.	16 (94%)	1 (6%)
Parity:		
⩽2	16 (94%)	1 (6%)
> 2	21 (78%)	6 (22%)
Clinical stage:		
1a	11 (100%)	0
1b	26 (78%)	7 (22%)
Node status:		
Positive	3 (75%)	1 (25%)
Negative	34 (85%)	6 (15%)
Histology:		
Squamous:		
Differentiation		
Well	1	0
Moderate	22 (82%)	5 (18%)
Poor	8 (80%)	2 (20%)
Adenocarcinoma:	5 (83%)	1 (27%)
Recurrence:		
Nil	36 (100%)	0
Pelvis	1 (17%)	5 (83%)
Abdomen	0	1
Distal	0	1

A variety of prognostic factors is assessed against outcome in the Table. The only clearly significant predictor is the presence or absence of recurrence at follow-up. Only one patient survived more than 24 months after detection of recurrence; the majority died within one year. Only two recurrences occurred over two years after primary surgery, and only one patient died more than three years after primary surgery. The mean recurrence interval was 12 months and the mean mortality interval from primary surgery 22 months. The actuarial five year survival is 84%.

DISCUSSION

Five year survival rates for stage 1 cervical carcinoma treated by radical hysterectomy have been reported by Benedet[5] (81·8% of 88 patients), Powell[6] (90·3% of 238 patients), and Artman[7] (84·0% of 153 patients). These results compare favourably with those reported for radiotherapy of stage 1 carcinomas by Bygdeman[8] (88·0% of 60 patients) and Hanks[9] (92% of patients from a multicentre review). Houston[4] reported a 67·6% five year survival of 71 patients with stage 1 disease treated at the Northern Ireland Radiotherapy Centre.

No cases of deep vein thrombosis occurred even though prophylactic anticoagulants were not employed routinely in this series, prevention being dependent on early mobilization. No case of vaginal fistula occurred in this series and preoperative radiotherapy was not used. Benedet[5] showed the incidence of vaginal fistula to be much higher in the group which received preoperative radiation therapy than in the group which did not. The five year survival rates were not statistically different.

In terms of prognostic factors higher age and lower parity seem to confer a slightly better prognosis which is the international experience. However nodal status and histological grading were of little value, as also observed by Rommel.[10] Crissman[11] has suggested that lymphatic and vascular space involvement in the primary tumour is actually of greater prognostic value than confirmation of nodal metastasis, but we did not record such involvement. The single most important prognostic factor is recurrence: even after palliative radiotherapy only one patient is alive more than two years later.

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authors recommend an aggressive approach including nutritional assessment, biopsy, contrast radiography and endoscopy, to confirm the diagnosis in chronic granulomatous conditions of the mouth and to detect coincidental gastrointestinal involvement in cases of Crohn's disease.[4, 14] This case, where clinical assessment was equivocal, confirms the traditional difficulties in distinguishing between the two conditions. The evidence of malnutrition encouraged us to recommend careful follow up and nutritional assessment. We feel it is reasonable to reserve contrast radiology, endoscopy and biopsy for cases where specific symptoms or nutritional assessment suggest that they are indicated. Careful clinical examination, particularly of the perianal area, is necessary in all patients with chronic orofacial swelling.

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